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ABSTRACT

Verbal responses of 50 college freshmen were compared to determine whether any differences existed between the types of responses given by students listed as high or low in verbal ability according to the Scholastic Aptitude Test (SAT). The students, from two colleges, were tested individually using an experimenter-devised language inventory which asked for first reaction verbal responses to a list of mixed concrete and abstract words. The verbal responses were analyzed according to a paradigmatic or syntagmatic classification. A t-test used to analyze the scores indicated a significant difference between verbal SAT achievement and mean syntagmatic responses--low verbal ability students produced significantly more syntagmatic responses. These results and others cited implied that a shift from syntagmatic to paradigmatic responses might be the result of learning which could take place at any time rather than having a part in a developmental sequence. It was concluded that since standardized tests often require paradigmatic responses it is important that students understand the superordinate, coordinate, whole-part, or contrast structures necessary to make such responses. It was further concluded that assessment of verbal response type is a good predictor of SAT verbal performance. References and tables are included. (MS)

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Syntagmatic Oral Responses Compared with High and Low Verbal SAT Scores of College Freshman

by

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This investigation was undertaken to ascertain whether there were differences in the verbal performance of college freshman. Students identified as high risk students were compared with college freshman who were thought to have a very good chance of succeeding in college because of their performance on the Scholastic Aptitude Test. The verbal responses were to be recorded and analyzed according to a paradigmatic or syntagmatic classification. Specifically is there any relationships between verbal responses, which are classified as syntagmatic, and scores achieved on the verbal section of the SAT? Paradigmatic responses are those responses which have the

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following classification: superordinate, coordinate, whole-part or are a contrast. All other verbal responses shall be classified as syntagmatic. (e.g. dark-night, dark-skin, hot-rod, hot-sun).

Sixty college freshman, 30 from a liberal arts institution in Pennsylvania and 30 from a state university in Kentucky were classified as high or low risk students according to verbal scores achieved on the Scholastic Aptitude Test. The mean SAT score for the high risk group was below the national average for high school seniors tested in 1969-70. (College Board Reports 1970). The low risk group had a mean above the national SAT average.

All subjects were individually tested on the C/A Oral Language Inventory. The directions were "Give me the first word you think of when I say this word." No trials were given, 30 responses were recorded by the examiners. The C/A Language Inventory took about 4 minutes to administer. The C/A list of words were compiled from Paivio's (1968) list of concrete-abstract words. The C/A list contains 21 words found on the AA section of the Thorndike-Lorge (1944) frequency count, 4 on the A section and 5 from 1-49.

ORAL C/A LANGUAGE INVENTORY

Directions: Give me the first word you think of when I say this word.

1. book
2. king
3. joy
4. arm
5. life
6. soul
7. fun
8. river
9. fact
10. apple
11. boy
12. duty
13. star
14. bravery
15. idea
16. toy
17. charm
18. wife
19. love
20. rock
21. time
22. pride
23. cat
24. honor
25. tree
26. woman
27. truth
28. car
29. bird
30. greed

The results of the language responses were analyzed and subjected to a t-score test for significance. Table I shows the results of this analysis.

Insert Table I about here

The difference between high and low verbal SAT achievement and the mean syntagmatic responses was significant at the .01 level of confidence. College freshman with poor verbal ability, as indicated by scores on the verbal section of the SAT, responded with a significantly higher portion of syntagmatic responses. A further analysis of the syntagmatic responses indicate that the

individual is responding with an internalized meaning or an independent experience to the stimulus word (e.g. apple-pie, love-beer, wife-Rose, car-Buick). This type of free association is not rewarded or even accepted in the realm of testing. Since rewards are given to those who conform to "acceptable standards" this possibly creative individual is relegated to the pile of "risk" or "doesn't have it" students. An awareness of what is expected in testing might change the whole picture for a given student.

The findings of this investigation do not agree with a statement made by Ervin (1961) "that a syntagmatic-paradigmatic shift occurs between kindergarten and sixth grade". It seems that the shift is not a product of maturation, but a learning which might not take place even at the college level. Those subjects who have not made a substantial paradigmatic shift will do poorly on exams which view such criteria as accepted "adult" or "educated" behavior. Gagne and Wiegand (1970) investigating the effects of the use of superordinate type context on the learning and retention of facts find that if superordinates are used the organization has a positive effect on a subjects learning. The subject will do poorly if this type of structure is absent. Syntagmatic verbal behavior shows a lack of awareness of a superordinate or coordinate structure or at least the lack of using such a structure as a means of "educated" communication. Bickley (1970) in an investigation of young adults language responses indicated that if a subject is functioning syntagmatically he will do poorly on the Otis Mental Maturity Test. The test also uses paradigmatic responses as the correct response to stimuli.

It seems that if a student is going to achieve acceptable results on tests which use a paradigmatic frame of reference for "correctness" then learning a structure of superordinate, coordinate, whole-part, or contrast is extremely

important. An examiner can predict, with a good degree of accuracy, how an individual will perform on the verbal section of the Scholastic Aptitude Test through assessing his verbal responses.

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TABLE I

An Analysis of Syntagmatic Responses and High and Low Verbal SAT Scores of College Freshman

GROUP	Mean Syntagmatic Responses	SD of Mean	Diff. of Mean	SE of Diff.	t-ratio
High SAT	13	3.25	9	.675	13.33
Low SAT	22	1.77			

P< .01*